

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as First Class Mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

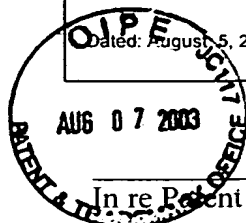
Dated: August 5, 2003

Signature: Paul B. Stephens

Paul B. Stephens

Docket No.: 30203/37263  
(PATENT)

2873.  
#131 letter  
re  
IDS



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: Roger L. Frick et al.

Application No.: 09/905,736

Group Art Unit: 2873

Filed: July 13, 2001

Examiner: Jack Dinh

For: Optical Switch with Moveable Holographic Optical  
Element

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**PETITION FOR CONSIDERATION OF INFORMATION DISCLOSURE**  
**STATEMENT PURSUANT TO 37 C.F.R. §1.97(C)**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

This petition has been filed to request proper consideration of previously-cited documents. A copy of the previously submitted Second Supplemental Information Disclosure Statement (dated April 1, 2003) and accompanying form PTO-1449 is attached herewith. See, Ex. A.

The present application was filed on July 13, 2001. A first Information Disclosure Statement was mailed on March 15, 2002. A Supplemental Information Disclosure Statement was mailed on March 26, 2003. The documents cited in these two Information Disclosure Statements have been properly considered by the Examiner.

On April 1, 2003, the Applicants filed the Second Supplemental Information Disclosure Statement (Ex. A), along with the fee set forth under 37 C.F.R. §1.97(c). Over two months later, on June 18, 2003, the patent office mailed a Notice of Allowance (Ex. B) allowing all pending claims. That Notice of Allowance included a signed returned copy of the March 26, 2003 Supplemental Information Disclosure Statement. However, there was no indication in the Notice of Allowance that the documents cited in the Second Supplemental Information Disclosure Statement (*i.e.*, that of April 1, 2003) had been considered.

Applicants' representative contacted the Examiner to inquire as to the status of the review of the Second Supplemental Information Disclosure Statement. The Examiner

indicated that this Second Supplemental Information Disclosure Statement had not been reviewed prior to the Notice of Allowance. The Examiner stated that the Second Supplemental Information Disclosure Statement had never been placed in the file, suggesting that it may have been lost.

The Applicants hereby petition the Commissioner to have the documents of this Second Supplemental Information Disclosure Statement (Ex. A) properly considered and a new Notice of Allowance or action on the merits issued. The error was that of the Patent Office.

The Second Supplemental Information Disclosure Statement was properly and timely submitted to the Patent Office. Pursuant to 37 C.F.R. §1.97(c) and MPEP §609, this statement should have been considered by the Examiner. In particular, Exhibit A clearly shows a certificate of mailing executed April 1, 2003. A photocopy of the return receipt postcard for that submission showing that it had been received by the OIPE Office on April 7, 2003 is attached. *See, Ex.* C. Clearly, the Information Disclosure Statement was properly and timely mailed and received prior to the mailing of the Notice of Allowance. Therefore, it should have been (and must now be) considered.

The issue fee for this case is due by September 18, 2003. Therefore, Applicants respectfully request the grant of this Petition and the mailing of a second notice of allowance or action on the merits before September 18, 2003. The Applicants further request that the Examiner contact the below-signed representative by telephone advising him when the mailing has been sent.

It is believed that no fee is due. However, if it is determined that a petition fee is due, the Commissioner is hereby authorized to charge any deficiencies in the amount enclosed or any additional fees which may be required to deposit account number 13-2855. A duplicate of this paper is enclosed.

Application No.: 09/905,736

Docket No.: 30203/37263

A courtesy copy of this Petition is being sent via facsimile to Technology Center 2800 at (708) 308-7724.

Dated: August 5, 2003

Respectfully submitted,

By: 

Paul B. Stephens

Registration No.: 47,970

MARSHALL, GERSTEIN & BORUN LLP.

233 S. Wacker Drive

6300 Sears Tower

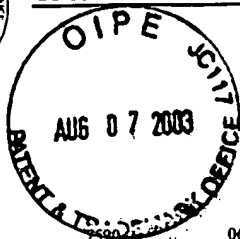
Chicago, Illinois 60606-6357

(312) 474-6300

Attorneys for Applicant



## UNITED STATES PATENT AND TRADEMARK OFFICE



04743

06/18/2003

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6300 SEARS TOWER  
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CHICAGO, IL 60606-6357

UNITED STATES DEPARTMENT OF COMMERCE  
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## NOTICE OF ALLOWANCE AND FEE(S) DUE

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JUN 24 2003

MARSHALL GERSTEIN

EXAMINER

DINH, JACK

ART UNIT	CLASS-SUBCLASS
2873	385-016000

DATE MAILED: 06/18/2003

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,736	07/13/2001	Roger L. Frick	30203/37263	5345

TITLE OF INVENTION: OPTICAL SWITCH WITH MOVEABLE HOLOGRAPHIC OPTICAL ELEMENT

DOCKETED

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1300	\$300	\$1600	09/18/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

## HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

☐ Applicant claims SMALL ENTITY status.  
See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

AK

**Notice of Allowability**

Application No.

09/905,736

Applicant(s)

FRICK ET AL.

Examiner

Jack Dinh

Art Unit

2873

**- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 03/03/03.
2. ☒ The allowed claim(s) is/are 1-48.
3. ☒ The drawings filed on 03 March 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.
5. ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.
  - (b) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.
  - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892)  | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)          |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                    | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____             |
| 5 <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. <u>9</u> | 6 <input type="checkbox"/> Examiner's Amendment/Comment                             |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
|  | 9 <input type="checkbox"/> Other  |

### REASONS FOR ALLOWANCE

1. Claims 1-48 are allowed in light of applicant's arguments.

2. The following is a statement of the examiner's reasons for allowance. The present invention relates generally to optical elements and more specifically to optical gratings and holographic optical elements used to perform optical switching functions.

limitations that distinguish the claimed invention over the prior art. More specifically:

(a) Independent claim 1 reads on an optical switch comprising, *inter alia*, a substrate for transmitting an optical signal within the substrate where said optical signal propagates in the substrate in a first direction under total internal reflection, taken together in a novel combination that further includes a diffractive optical element disposed above a top surface of the substrate and moveable relative thereto between a first position substantially out of evanescent field coupling with the optical signal, such that the optical signal continues to travel in the first direction, and a second position in evanescent field coupling with the optical signal to alter the propagation of the optical signal into a second direction. Independent claim 44 is directed to a 1xN optical switch comprising the novel diffractive optical element as described above.

(b) Regarding claim 27, prior art fails to teach a combination of all the claimed features as presented, wherein the claimed invention is a holographic optical element comprising a substrate where the light signal propagates under total internal reflection, and a plurality of movable

Art Unit: 2873

transparent strips disposed on the substrate determining which direction the light signal should propagate.

(c) Regarding claim 46, prior art fails to teach a combination of all the claimed features as presented, wherein the claimed invention is an optical switch where signals propagate in two directions depending on the position of several space-apart strips disposed on top of a substrate.

3. The prior art taken either singly or in combination fails to anticipate or fairly suggest the limitations of the independent claims, in such a manner that a rejection under 35 USC 102 or 103 would be improper. The claimed invention is therefore considered to be in condition for allowance as being novel and non-obvious over prior art. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Other Information/Remarks***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack Dinh whose telephone number is (703) 605-0744. The examiner can normally be reached on M-T (8:30 AM - 6:30 PM). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y Epps can be reached on (703) 308-4883. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319

Application/Control Number: 09/905,736

Page 4

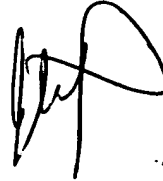
Art Unit: 2873

for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

June 11, 2003



Jack Dinh  
Patent Examiner



JORDAN SCHWARTZ  
PRIMARY EXAMINER





# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,736	07/13/2001	Roger L. Frick	30203/37263	5345
04743	7590	06/18/2003	EXAMINER	
MARSHALL, GERSTEIN & BORUN 6300 SEARS TOWER 233 SOUTH WACKER CHICAGO, IL 60606-6357			DINH, JACK	
			ART UNIT	PAPER NUMBER
			2873	

DATE MAILED: 06/18/2003

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The patent term adjustment to date is 0 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 0 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (<http://pair.uspto.gov>)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.



# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,736	07/13/2001	Roger L. Frick	30203/37263	5345
04743	7590	06/18/2003	EXAMINER	
MARSHALL, GERSTEIN & BORUN 6300 SEARS TOWER 233 SOUTH WACKER CHICAGO, IL 60606-6357 UNITED STATES			DINH, JACK	
			ART UNIT	PAPER NUMBER
			2873	
DATE MAILED: 06/18/2003				

## Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003: Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: <http://www.uspto.gov/main/howtofees.htm>.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

30203/37263

4/1/03

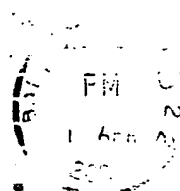
The Patent Office is hereby requested to acknowledge receipt  
of the following papers by stamping and returning this card.

Frick et al.  
09/905,736

2nd Supplemental Information Disclosure Statement w/Form  
PTO-1449 w/ 1 U.S., 2 Foreign, 2 Other

Fee \$180.00 ck#: 901545

w/certificate of mailing dated April 1, 2003



MARSHALL, GERSTEIN & BORUN

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